Fusion3

EDGE 3D Printer
F200 3D Printer

ADVANCED TOPICS:
MODE SWITCHES & SYSTEM OPTIONS

Revision 6/30/2025

EDGE & F200 MODE SWITCHES & SYSTEM OPTIONS

Description of what various modes and system options on EDGE & F200 do.

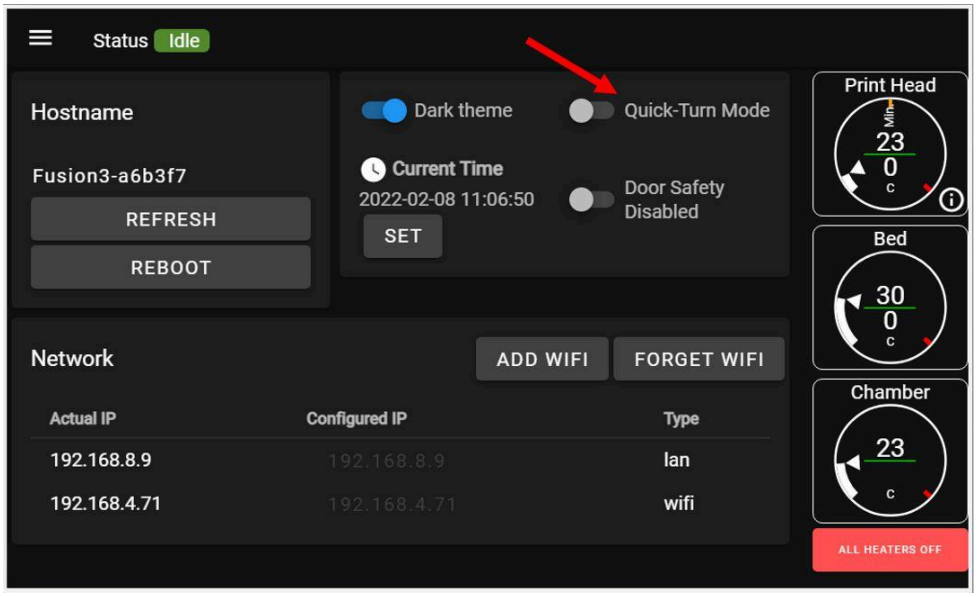
The EDGE & F200 have a number of system options and mode switches that are available for you to customize how the printer works:

1. Quick-turn mode
2. Door safety interlock
3. Light / high-contrast UI mode
4. Password protection
5. SSH remote connections

QUICK-TURN MODE

Where to Find

Menu > Settings > Quick-turn mode toggle



The default is OFF.

What it Does

We added a ton of new functionality to EDGE & F200 over our existing products. The downside is all of these add time to the start-of-print sequence:

- Tool plate bed (takes longer to heat up & cool down)
- Sophisticated bed leveling system (takes time to probe 25 points)
- Automatic nozzle offset calibration (takes time to clean head, check height & check probe)

We know throughput and the ability to quickly cycle the printer are important to some of our customers. In order to support these use cases better, we created Quick-Turn Mode. When enabled, the following changes to default behavior take place:

- Bed is left **ON** at the end of a print, to eliminate cool-down and reheat time
- The printer will ask if you want to repeat the last print at the end of a print
- 25 point grid is replaced with a single probe in center of bed
- Nozzle offset check is skipped

This can cut as much as 20 minutes out of a print's startup time.

NOTE: You will need to allow the print surface to come up to temperature after removing it to remove your print, and then putting it back in the printer.

Potential Downsides

However there are some potential downsides to enabling Quick-Turn Mode:

- You will need to remove the print surface from the printer at the end of the print to allow the print to cool down and release from the bed.
- Your first layer may be less accurate. You will need to more carefully supervise the first layer and make adjustments as needed with Babystepping.

WARNING: We do not recommend this feature for new / inexperienced users, or in environments where multiple people use the same printer.

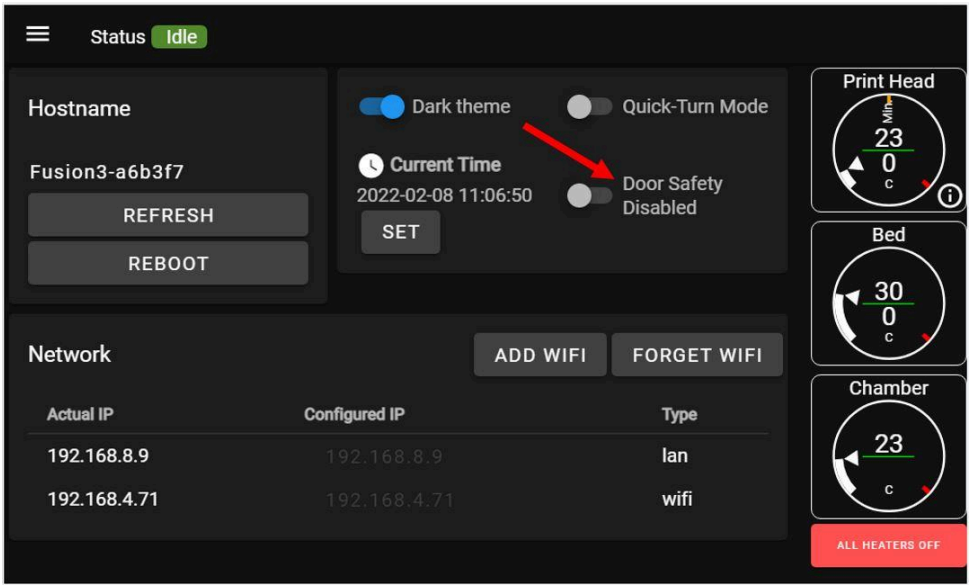
See Also

EDGE Bed Leveling module HERE
F200 Bed Leveling module HERE

DOOR SAFETY INTERLOCK

Where to Find

Menu > Settings > Door Safety toggle



Default is ON.

What it Does

With the door safety ON:

- Both the EDGE & F200 will not allow you to start a print with the main door open.
- Both the EDGE & F200 will pause a print if the main door is opened during the print.

We understand that this behavior, while safer, is not desirable to some more advanced users or in some use cases. So we made it possible to disable the door safety.

With the door safety OFF:

- You can start a print with the main door opened or closed.
- You can open the main door at any time during a print.

NOTE: After changing the door safety toggle, you may need to close and open the door for it to take effect.

WARNING WARNING WARNING

Fusion3 assumes no liability for injury, property damage, or death that may occur due to operating the printer with the door safety interlock disabled. Users do this at their own risk and under their own direction.

LIGHT / HIGH-CONTRAST UI MODE

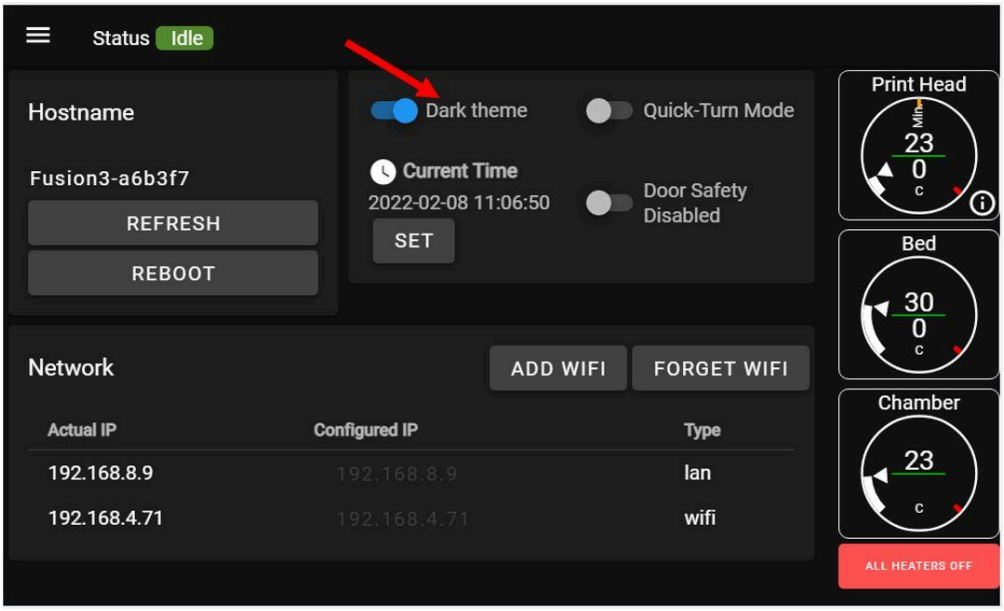
Where to Find

Menu > Settings > Dark Mode toggle

Default is DARK MODE

What it Does

Some users may prefer a brighter/lighter user interface. This mode also has generally higher contrast if that's desired.



PASSWORD PROTECTION

Where to Find

It's a command you send on the *Utilities > Console* screen.

To enable, type **M98 P"password"** and press enter/send.

To disable, type **M98 P"nopassword"** and press enter/send.

Default is **DISABLED**.

What it Does

When enabled, a user must enter the password in order to use the printer's user interface. This applies to both the onboard LCD and the network interface.

The default passwords are:

- EDGE: "fusion3edge"
- F200: "fusion3f200"

To Change the Password

1. You must have EDGE & F200 connected to your local network and are able to connect to it with your computer.
2. Using a web browser, navigate to "*[printer's ip address]/files/system*"
3. Open the file "*config.g*".
4. Scroll down to the bottom of the file to find the block of text that begins with "*; password check*".

```
;password check
if global.password = true
    M551 P"fusion3edge"
```

5. Edit the text string that follows the **P** parameter in the **M551** command. You must enclose your password in quotation marks.
    a. For example, if you want your password to be "letmein", the line would read **M551 P"letmein"**
6. Save the file. The printer will prompt you to reboot it or reload the file. Select reboot.

SSH CONNECTIONS

What it is

SSH connections allow Fusion3 technical support to connect to your printer remotely to perform advanced diagnostics or other activities. This has a number of requirements outside of your printer:

- Your EDGE & F200 must be connected to a local network with internet access.
- Your network must allow SSH connections on port 22.
- You must know your external IP address for your network.

Default is **DISABLED**.

How to Use

1. Go to Utilities > Console.
2. Type **M98 P"ssh"** to enable.
3. Type **M98 P"nossh"** to disable.

The SSH connection will reset to disabled when the printer is power cycled.

Note: Fusion3 tech support does not have a way to remotely enable access to your printer. This is something that you, the end user, completely control.